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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,024	04/12/2004	Mitsuhiro Wada	02309/100H368-US1	3544
7278	7590	08/15/2006	EXAMINER	
DARBY & DARBY P.C. P. O. BOX 5257 NEW YORK, NY 10150-5257			HAND, MELANIE JO	
			ART UNIT	PAPER NUMBER
			3761	

DATE MAILED: 08/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/823,024

Applicant(s)

WADA, MITSUHIRO

Examiner

Melanie J. Hand

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4 and 8-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4,8-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Response to Arguments

Applicant's arguments, see Remarks, filed July 24, 2006, with respect to the rejection(s) of claim(s) 4 and 8-10 under 35 U.S.C. 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of a newly found prior art reference.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 4, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jessup et al (U.S. Patent No. 6,039,716) in view of Mitchell et al (U.S. Patent No. 5,637,106) and further in view of Glassman (U.S. Patent No. 5,047,024).

With respect to **Claim 8**: Jessup teaches flat absorbent member 12 that is rolled and then compressed into an "M-shaped" pledget 50 (Figs. 7,8,10,12) for use as a tampon. Ribbon 12 in the rolled state forms elongated absorbent 14 that is then completely covered by liquid-permeable cover 16. (Figs. 1,3,5) ('716, Col. 3, lines 55,56, Col. 5, lines 10,20-22) Cover 16 is

formed from a nonwoven apertured film wherein said film, and thus also said apertures, has a three-dimensional thickness. ('716, Col. 5, lines 48-50). Absorbent material 12 is comprised of rayon fibers. ('716, Col. 3, lines 64,65) Cover 16 is comprised of bonded carded nonwoven webs of polyester fibers ('716, Col. 5, lines 42-44), of which polyethylene terephthalate is one example.

Jessup does not teach that said apertures penetrate the surface of the absorbent material 12. Mitchell teaches an absorbent insert that comprises a topsheet and backsheet and absorbent core, and that said insert material, in its flat unrolled state is subject to embossing to produce transfer sites through which liquid is transferred away from the user. ('106, Abstract) Mitchell teaches that said embossing results in the creation of channels 34 of higher fiber density that are interconnected and form a network providing excellent wicking characteristics ('106, Col. 4, lines 29-38), therefore it would be obvious to one of ordinary skill in the art to modify the absorbent material 12 with cover 16 by subjecting said material to embossing which would result in sites adjacent to said transfer sites wherein fibers would be compressed and entangled and thus have a higher fiber density as said transfer sites result in more rapid wicking of liquid away from the body surface of a wearer as taught by Mitchell. It would further be obvious to one of ordinary skill in the art to emboss absorbent material 12 prior to compression and in a separate step, as doing so would ensure that the fibers of said material are already oriented in such a manner as to facilitate entanglement such that upon compression, the entanglement would be at least as effective if not improved when compared to a process in which the embossing step is relied upon to provide the only means of compression and entanglement.

Neither Jessup nor Mitchell teaches an absorber that is folded into a column shape to have a generally "M" shaped cross-section. Glassman teaches a tampon having an absorbent

rayon material that is folded along three fold lines extending in a longitudinal direction to have three clefts defined between adjacent folds and then compressed over an entire length into a column shape. ('024, Fig. 3B) As can be seen in Fig. 3A, Glassman also teaches a fold that is substantially identical to that taught by Jessup, and Glassman teaches that Fig. 4 is the tampon of either Fig. 3A or Fig. 3B after the tampon is suggested to pressure, therefore either fold results in a tampon that is substantially and functionally identical, therefore the fold are equivalent alternatives and it would be obvious to one of ordinary skill in the art to fold the tampon taught by Jessup in Figs. 6-8 in the manner taught by Fig. 3B of Glassman, as either produces a functional tampon.

With respect to **Claim 4**: Jessup teaches flat absorbent member 12 formed of a fibrous rayon web and a spunbond nonwoven liquid-permeable cover 16. (Figs. 1,3,5) Jessup does not explicitly teach a web comprising polyethylene terephthalate spunbond, however Jessup teaches a polypropylene web, which is substantially similar in its permeability properties to polypropylene, therefore it would be obvious to one of ordinary skill in the art to either substitute the polypropylene web for a PET web or add PET fibers to the polypropylene fibers with a reasonable expectation of success.

With respect to **Claim 9**: The tampon taught by Glassman and folded in the manner taught in Fig. 3B yields a tampon folded and compressed into a column shape to have a generally M-shaped cross-section.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jessup et al (U.S. Patent No. 6,039,716) in view of Mitchell et al (U.S. Patent No. 5,637,106) and further in

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view of Glassman (U.S. Patent No. 5,047,024) as applied to claims 4, 8 and 9 above, and further in view of Osborn, III et al (U.S. Patent No. 5,885,265).

With respect to **Claim 10**: The combined teaching of Jessup and Mitchell and Glassman does not teach a depth, diameter or density for said three-dimensional apertures. With respect to diameter and density, Osborn teaches an interlabial absorbent article 20 with a cylindrical shape ('265, Col. 5, lines 26-28) having a topsheet 28 and backsheet 30 wherein topsheet 28 contains a plurality of apertures 50. Osborn teaches an aperture density of between 9-400/in² and an open area percentage of 30-40%. ('265, Col. 36-39, 46-48) Taking these teachings into account, the range for aperture diameter is 0.54-3.5 mm. Osborn is silent regarding the specific motivation for teaching aperture densities in said range, however Osborn teaches that article 20 is water-dispersable and flushable, and a higher density of apertures would hasten absorption and breakdown of the article in water and thus have a similar effect in terms of absorbing exudates more rapidly and transferring said exudates to absorbent core 32, therefore it would be obvious to one of ordinary skill in the art to modify the liquid-permeable apertured film cover 16 taught by the combined teaching of Jessup and Mitchell and Glassman to have an aperture density in the range taught by Osborn.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie J. Hand whose telephone number is 571-272-6464. The examiner can normally be reached on Mon-Thurs 8:00-5:30, alternate Fridays 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on 571-272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Melanie J Hand
Examiner
Art Unit 3761

MJH

TATYANA ZALUKAEVA
SUPERVISORY PRIMARY EXAMINER

